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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

12/27/2002

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EXAMINER

BRUENJES, CHRISTOPHER P

ART UNIT

PAPER NUMBER

1772

DATE MAILED: 12/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/763,135

Applicant(s)

SENEOR, DAVID

Examiner

Christopher P Bruenjes

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Withdrawn Rejections

1. The objections to the Specification and the 35 U.S.C. 112 rejections of claims 1, 2 and 4 of record in Paper #8, Paragraphs 1-3 have been withdrawn due to Applicant's amendment in Paper #9.
2. The 35 U.S.C. rejections of claims 1-4 and 6-8 of record in Paper #8, Paragraphs 4 and 5 have been withdrawn due to Applicant's arguments in Paper #9 and further consideration of the Sharp reference.
3. The 35 U.S.C. rejection of claim 5 of record in Paper #8, Paragraph 6 has been withdrawn due to the rejection of claim 4 being rewritten as a 35 U.S.C. 102 rejection.

NEW REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 3-4, and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Sharp (USPN 5,553,734).

Sharp teaches an underground reservoir used for storing liquid comprising an inner, main reservoir made of conventional steel (col.8, 11.32-36) and an outer, secondary wall comprising a coating layer made of a separating material of corrugated cardboard or waxed surface paper (col.9, 11.17-31) and resinous material, which is considered a continuous wall, is formed over the separating material areas (col.9, 1.51-53). The continuous wall or resin material is a resinous material alone, up to a desired wall thickness (col.6, 11.48-51). The resin material making up the continuous wall is polyurethane (col.6, 11.7-32). Therefore, the secondary wall comprises an inner layer made of paper and an outer layer made of polyurethane. The thickness of the separating materials is between 0.25mm and 12.7mm (col.9, 11.29-31) and the resinous material alone is added up to a desired wall thickness. Therefore, although Sharp doesn't explicitly teach a thickness for the resinous material coated on the separating materials, it inherently has a thickness greater than 2.5mm based on the thickness of the separating material before the addition of the resinous material.

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp (USPN 5,553,734) in view of Bartelloni (USPN 4,510,019).

Sharp teaches all that is claimed in claims 1 and 4, and teaches a wax treated paper or corrugated board used as the separating material between the steel and polyurethane. Sharp doesn't explicitly teach using a latex-based paper for the layer between the steel and polyurethane. However, Bartelloni teaches

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special papers, especially latex-based papers are liquid resistant papers used for the manufacture of construction and coating papers and boards. Bartelloni also teaches that latex-based papers are demanded for use in construction because the polymeric materials added as latex confer on the paper impermeability, flexibility and resistance (col.1, 11.19-30). One of ordinary skill in the art would have recognized that latex-based papers having increased flexibility and resistance over wax surface paper would be a better separating material in building the tank system because the paper would need to bend around the round surfaces of the underground surface tank.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute latex-based paper for the waxed surface paper used by Sharp for the separating material between the steel layer and the polyurethane layer, because the latex-based paper has an increased flexibility and resistance as taught by Bartelloni, which would be preferred when applying the paper layer to a round steel surface.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sharp (USPN 5,553,734) in view of Mitchell (USPN 5,090,586).

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Sharp teaches all that is claimed in claim 4 and that before adding a resin or coating layer a surface preparation is given to enhance bonding (col.5, 11.43-46). Sharp does not explicitly teach an example of a surface preparation that would enhance bonding. However, Mitchell teaches that it is a common technique to abrasive or "jet" blast steel for the purpose of enhancing bonding in the dual wall tank art (col.4, 11.14-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a step in making Sharp to abrasive or "jet" blast the steel main reservoir before applying the coating in order to enhance bonding as taught by Mitchell.

Response to Amendment

7. Applicant's arguments filed in Paper #9 regarding the 35 U.S.C. 112 rejection of record have been considered but are moot since the rejections have been withdrawn.

8. Applicant's arguments filed in Paper #9 regarding the 35 U.S.C. rejections of claims 1-4 and 6-8 as obvious over Sharp, Oxley, and Gurin have been considered but are moot since the rejections have been withdrawn.

9. In response to applicant's argument that the Sharp patent uses support ribs, it is noted that the comprising language of

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the applicant's claims provides for support ribs to fall within the metes and bounds of the claimed limitations. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ 2d 1057 (Fed. Cir. 1993).

10. In response to applicant's argument that the Sharp patent uses fiber-reinforced resin as the outer layer, the new rejection shows that resin can be added alone without fiber reinforcing on to a paper separating material rather than filament. The new rejection also shows that the resin added to the separating material does not have the high thickness that is argued with the resin on the filament. Besides the current claim 8 only limits the thickness of the resin to a range greater than 2.5mm, in which 4cm to 12cm rests.

11. The Applicant gave no arguments to the 35 U.S.C. 103 rejection of claim 5 of record in Paper #8; therefore the Applicant, by not traversing the claim, has agreed with the examiner that the rejection of claim 5 is upheld.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to

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Christopher P Bruenjes whose telephone number is 703-305-3440.

The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB

December 24, 2002




HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772 12/24/02